

ABSTRACT OF THE DISCLOSURE

A magnetic cell comprises: a first ferromagnetic layer whose magnetization is substantially fixed in a first direction; a second ferromagnetic layer whose magnetization is substantially fixed in a second direction opposite to the first direction; a third ferromagnetic layer provided between the first and the second ferromagnetic layers, a direction of magnetization of the third ferromagnetic layer being variable; a first intermediate layer provided between the first and the third ferromagnetic layers; and a second intermediate layer provided between the second and the third ferromagnetic layers. The direction of magnetization of the third ferromagnetic layer can be determined under an influence of spin-polarized electrons upon the third ferromagnetic layer by passing a current between the first and the second ferromagnetic layers.